

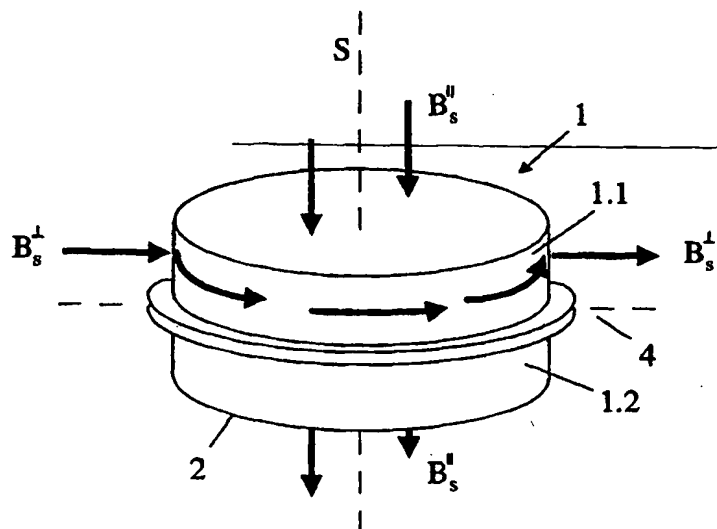
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<p>(21) International Application Number: PCT/EP98/06056</p> <p>(22) International Filing Date: 24 September 1998 (24.09.98)</p> <p>(30) Priority Data: 197 42 548.8 26 September 1997 (26.09.97) DE</p> <p>(71) Applicant (for all designated States except US): HE-LISPIN POLARISIERTE GASE GMBH [DE/DE]; Galileo-Galilei-Strasse 10, D-55129 Mainz (DE).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): AIDAM, Elke [DE/DE]; Forsthaus Langenberg, D-76744 Wörth (DE). EBERT, Michael [DE/DE]; Staffelfweg 4, D-55286 Wörrstadt (DE). GROSSMANN, Tino [DE/DE]; Freiherr-vom-Stein-Strasse 28, D-55131 Mainz (DE). HEIL, Werner [DE/FR]; La Giraudière, F-38760 Varcès-Alliers et Risset (FR). OTTEN, Ernst-Wilhelm [DE/DE]; Carl-Orff-Strasse 47, D-55127 Mainz (DE). ROHE, Daniela [DE/DE]; Johannesstrasse 51, D-56070 Koblenz (DE). SURKAU, Reinhard [DE/DE]; Willi-Wolf-Strasse 22, D-55128 Mainz (DE).</p> <p>(74) Agents: COCKBAIN, Julian et al.; Frank B. Dehn &amp; Co., 179 Queen Victoria Street, London EC4V 4EL (GB).</p>		<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published With international search report.</p>

(54) Title: MAGNETICALLY SHIELDED CONTAINER



## (57) Abstract

The invention provides a magnetically shielded container (1) having disposed in parallel opposed position on an axis (S) thereof magnetic field homogenizing pole shoes (10.1, 10.2), having disposed about said shoes a magnetically shielded yoke (2), said pole shoes and yoke enclosing a magnetic chamber (26), said container further comprising magnetic field sources (2.4, 2.5) disposed about and radially distanced from said axis whereby there exists within said chamber substantially homogenous magnetic field  $B_0$  oriented in the direction of said axis and whereby there is a usable volume within said chamber where the ratio of the magnetic field gradient in the direction transverse to said axis to said magnetic field  $B_0$  has a value of no more than  $1.5 \times 10^{-3}/\text{cm}$ . By virtue of the very low ratio of weight to volume that is achievable with this construction, the containers according to the invention are economical to produce and especially suited to transporting polarized gasses.